

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

**Exxon Company, U.S.A.
Everett Terminal**

is authorized to discharge from a facility located at

**52 Beacham Street
Everett, MA 02149**

to receiving water named

Island End River to Mystic River

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective effective thirty (30) days from the date of issuance.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This Permit supersedes the permit issued on September 30, 1991.

This permit consists of 16 pages in Part I including effluent limitations, monitoring requirements; Attachment A, Marine Acute Toxicity Test Procedures & Protocol; Attachment B, PAH Listing and Attachment C, SPCC Guidance; etc., and 35 pages in Part II including General Conditions and Definitions.

Signed this 6th day of March, 2000

/Signature on file

Linda M. Murphy, Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

Glenn Haas, Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge treated effluent from outfall serial number 001A, Holding Tank 140 discharge. The discharge is comprised of stormwater, runoff from diked tank, non-diked areas, maintenance activities, tank and piping hydrostatic tests, the former effluent pond, marine containment facility, groundwater infiltration, treated tank bottom drawoff, and truck washing, to Island End River. Such discharges shall be limited and monitored by the permittee as specified below.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>			<u>Monitoring Requirement</u>	
		Average <u>Monthly</u> ⁷	Average <u>Weekly</u>	Maximum <u>Daily</u> ⁸	Measurement <u>Frequency</u>	<u>Sample Type</u>
Flow ⁴	MGD	Report	----	Report	Continuous	Meter
Total Suspended Solids (TSS)	mg/l	30		100	1/Month ³	Grab
Oil and Grease	mg/l			15	1/Month ³	Grab
Polynuclear Aromatic Hydrocarbons (PAHs)						
Single Chemical	ng/l ²			31	1/Month ³	Grab
Sum of all PAH's present	ng/l ²			31	1/Month ³	Grab
Volatile Organic Compounds						
Benzene	ug/l			40	1/Month ³	Grab
Toluene	ug/l			Report	1/Month ³	Grab
Ethylbenzene	ug/l			Report	1/Month ³	Grab
Xylenes (total 3 isomers)	ug/l			Report	1/Month ³	Grab
LC ₅₀ ^{5,6}	%	----	----	>50	2/year	Grab

PART I

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge treated effluent from outfall serial number 001B, Tank 140 By-Pass. The discharge is comprised of stormwater, runoff from diked tank, non-diked areas, maintenance activities, tank and piping hydrostatic tests, the former effluent pond, marine facility containment, groundwater infiltration, treated tank bottom drawoff, and truck washing, to Island End River. Such discharges shall be limited and monitored by the permittee as specified below. This discharge is only authorized when the flow to the oil/water separator exceeds 3000 gpm. Such discharges shall be limited and monitored by the permittee as specified below.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>			<u>Monitoring Requirement</u>	
		<u>Average Monthly⁷</u>	<u>Average Weekly</u>	<u>Maximum Daily⁸</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow ⁴	MGD	Report	----	Report	Continuous	Recorder
Total Suspended Solids (TSS)	mg/l	30		100	Each Discharge	Grab
Oil and Grease	mg/l			15	Each Discharge	Grab
Polynuclear Aromatic Hydrocarbons (PAHs)						
Single Chemical	ng/l ²			31	Each Discharge	Grab
Sum of all PAH's present	ng/l ²			31	Each Discharge	Grab
Volatile Organic Compounds						
Benzene	ug/l			40	Each Discharge	Grab
Toluene	ug/l			Report	Each Discharge	Grab
Ethylbenzene	ug/l			Report	Each Discharge	Grab
Xylenes (total 3 isomers)	ug/l			Report	Each Discharge	Grab
LC ₅₀ ^{5,6}	%	----	----	>50	2/year	Grab

Footnotes:

1. Samples taken in compliance with the monitoring requirements for outfall 001B, Tank By-Pass, specified above shall be taken before the by-pass flow discharges into the wet well.
2. ng/l stands for nanograms per liter. See Part I.A.3.p. for the limit at which compliance/noncompliance is based, see Part I.A.3 q. for sampling details.
3. Sample frequency of once per month is defined as a sampling of one (1) significant rainstorm in each calendar month.
4. See Part I.A.5. for flow rate control requirements.
5. The LC_{50} is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a >50% limit means that a sample of 50% effluent shall cause no more than a 50% mortality rate.
6. The permittee shall conduct acute toxicity tests two times per year for Outfall 001A in February and August for chemical analysis, and two times per year for Outfall 001B during a significant rainstorm event. The samples for both outfalls shall be analyzed in accordance with the protocol established in Attachment A. A 48-hour acute WET test will be performed on each sample using one specie, Mysid shrimp (Mysidopsis Bahia) according to the procedure in Attachment A-Acute Toxicity Procedure and Protocol, dated September 1996. Results from the toxicity testing shall be submitted within 30 days after the sampling date with the routine Discharge Monitoring Reports (DMRs).

Acute WET testing is used to determine the effluent concentration, by volume, that is lethal to 50 percent of the test organisms within a prescribed period of time, for this permit, 48 hours or less. Death is the effected measure. Effluent toxicity measured is expressed as the median lethal concentration, in percent effluent by volume, or LC_{50} .

After submitting 4 consecutive satisfactory toxicity test results for each outfall (Outfall 001A, Outfall 001B and the Tank Bottom Drawoffs), the permittee may request a reduction in the frequency of required toxicity testing. The permittee is required to continue testing at the frequency specified in the permit until notice is received by certified mail from EPA that the whole effluent testing requirement has been changed.

7. Average monthly discharge limitation as defined in 40 CFR Part 122.2 is the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. The measurement frequency required for each pollutant is the minimum number of measurements which must be taken during the specified period. If additional measurements are taken in accordance with the

monitoring requirements (i.e. proper sample type, analyzed using approved methods) these results must be reported (see General Requirements Section D.1.d.(2)). Where the permit requires once per month sampling, and maximum daily limits, the permittee should consider performing additional representative samples during the month to allow for effluent variability.

8. Maximum daily discharge as defined in 40 CFR Part 122.2 means the highest allowable daily discharge.

Part I.A. (Continued)

- 3 a. The discharge shall not cause a violation of the water quality standards of the receiving waters.
- b. There shall be no discharge of floating solids or visible foam other than in trace amounts.
- c. The pH of the effluent shall not be less than 6.5 nor greater than 8.5 at any time, unless these values are exceeded due to natural causes or as a result of the approved treatment processes.
- d. Samples taken in compliance with the monitoring requirements for outfall 001A, Holding Tank 140, specified above shall be taken at a representative location before mixing with any other stream.
- e. The discharge shall not cause objectionable discoloration of the receiving waters.
- f. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.
- g. As listed in 40 CFR Part 136, method 610 PAHs, see Attachment B for PAH listing.
- h. The discharge shall not contain materials in concentrations or combinations which are hazardous or toxic to human health, aquatic life of the receiving surface waters or which would impair the uses designated by its classification.
- i. The discharge shall not impart color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their use.
- j. Notwithstanding specific conditions of this permit, the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.
- k. There shall be no discharge of either untreated tank bottom drawoffs or ship barge/bilge

water alone or in combination with other wastewater unless specifically approved by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (DEP). The permittee must demonstrate that the proposed treated tank bottom drawoffs meet a Whole Effluent Toxicity (WET) LC_{50} for Mysid Shrimp, limit of 100% effluent as well as all the chemical and physical effluent limitations for Outfall 001.

- l. Chemicals (i.e. disinfecting agents, detergents, emulsifiers, etc.), bioremedial agents including microbes shall not be added to the collection and treatment systems without prior approval by EPA and the DEP to prevent hydrocarbon and/or particulate matter carryover into the Island End River.
- m. The bypass of storm water run off, wash water, or water used at the facility is prohibited, except during naturally occurring precipitation from severe weather incidents such as a hurricane. Each bypass shall be reported in the appropriate monthly DMR, indicating the estimated duration of the bypass.
- n. EPA may modify this permit in accordance with EPA regulations in 40 Code of Federal Regulations (CFR) §122.62 and §122.63 to incorporate more stringent effluent limitations, increase the frequency of analyses, or impose additional sampling and analytical requirements.
- o. The appearance of any size sheen attributable to the discharge from the Everett terminal shall be reported immediately by the permittee to the appropriate U.S. Coast Guard Officer in accordance with Section 311 of the Clean Water Act (CWA). This requirement is separate and distinct from the National Pollutant Discharge Elimination System (NPDES) permit requirements.
- p. Compliance/non-compliance for PAHs will be based on the Minimum Level (ML). ML is defined as the level at which the entire analytical system gives recognizable mass spectra and acceptable calibration points. This level corresponds to the lower points at which the calibration curve is determined based on analysis for the pollutant of concern in reagent water. It has been determined that the ML for each of the PAHs listed in Attachment B of the fact sheet is 10 ug/l. The ML for each PAHs will be 10 ug/l. The sum of all 16 PAHs must not exceed 50 ug/l. Neither the designated ML or the sum of all 16 PAHs can be changed except for a major modification.
- q. Discharge 001 - monitoring for PAHs, BETX (benzene, ethylbenzene, toluene, xylenes), will be done in accordance with the following protocol;
 - (1). A grab sample shall be taken during each storm event within the first hour after the storm event has started or after diked area pump-out has started. A negative Discharge Monitoring Report shall be submitted for each month that there is not a storm event and subsequently no storm water discharge.

- (2). The whole effluent toxicity test (WET) sample will be a portion of the sample taken in the first hour of the storm event and the analysis shall be in accordance with Attachment A. The WET samples will be taken during the months of March, and September.
- (3). During dry weather flow periods, the permittee is required to sample at least once per month treated effluent from Tank 140 which does not include stormwater run-off. The permittee shall take samples of Tank 140 by-pass discharge each time there is a significant rainstorm event and report it in accordance with conditions established in part I.A.2.

r. Laboratory Protocol

- (1). The quantitative methodology used for the PAH analysis must be capable of achieving a detection limit of less than or equal to 10 ug/l. The analysis for benzene, toluene, ethylbenzene, and xylene must achieve a detection limit of equal to or less than 2.5 ug/l.
- (2). The permittee shall provide a copy of the laboratory data sheets for each PAH and biological analysis giving test methods and the detection limit for each compound. Whenever possible, the analysis for BETX, PAHs and biological tests shall be from a split sample or separate samples taken in rapid sequence. BETX compounds can be analyzed using EPA's Method 602 with the addition of a xylene standard. The instrument calibration and the amount of quality control performed will be the same as for the other BETX compounds.
- (3). The permittee shall notify EPA and the State with any proposed hydrostatic-test water discharges. At a minimum, six (6) representative samples shall be taken of the hydrostatic-test water: one (1) grab sample of the influent; three (3) grab samples of the hydrostatic-test water prior to discharge (in-process); and two (2) serial-grab samples of the effluent, which after treatment through the O/W separator is discharged to the receiving waters.

The influent grab sample shall be taken approximately midway through the fill segment of the hydrostatic test procedure.

The three (3) grab in process samples which are representative of the hydrostatic test water after depressurization shall be analyzed and results evaluated prior to discharge through the conveyance and discharge systems. The hydrostatic-test water shall only be discharged if such analysis indicates that after appropriate management and treatment, all water quality standards must be met.

The first of the serial-grab samples shall be taken midway through the discharge,

and the final sample shall be taken at the end of the discharge. These effluent samples are required to document the effluent limits have been met at the point of discharge. All these samples should provide adequate characterization of the influent, in-process, and effluent hydrostatic-test water.

These influent, in-process, and effluent samples shall be analyzed for the following parameters:

- a. Total Suspended Solids (TSS)
- b. Oil and Grease (O/G)
- c. Total Iron
- d. Chemical Oxygen Demand (COD)
- e. Dissolved Oxygen (DO)

The hydrostatic test water released from the tank (s), after treatment through the O/W separator, must satisfy all the effluent limitations and conditions of the NPDES permit. The surface of the O/W separator should be routinely observed to determine if there is any detectable increase in the separated oil layer to prevent inadvertent hydrocarbons released to the receiving water.

The permittee may initiate the treatment of the hydrostatic test water in accordance with proposed procedures when these procedures have been approved (either written or verbal) by EPA and DEP. Any changes to these procedures must be approved by EPA and DEP prior to implementation.

Should any NPDES permit discharge parameter be exceeded, the hydrostatic test water transfer shall be halted immediately followed by notification to EPA and DEP of the exceedence.

After the transfer project has been completed, the permittee shall submit a letter/report to EPA and the DEP within 30 days of the transfer. The report shall contain the dates of the hydrostatic test transfer, the volume of hydrostatic test water transferred, the analytically determined values of the discharge parameters and a summary of the results of the transfer.

4. All existing manufacturing, commercial, mining and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels:”
 - (1) One hundred micrograms per liter (100 ug/l);

- (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. §122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 C.F.R. §122.44(f).
 - b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels:”
 - (1) Five hundred micrograms per liter (500 ug/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. §122.21(g)(7).
 - (4) Any other notification level established by the Director in accordance with 40 C.F.R. §122.44(f).
 - c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
5. Oil/Water (O/W) Separator Flow Control

The permittee shall control the water flow rate through an oil/water separation system to the optimum design flow via a continuous recording flow meter. On the effective date of the permit, using continuous recording flow meters, the permittee shall manually control the separator. Alternatively, the permittee may request that the Regional Administrator accept substitution of an alternate method of control which may include the following:

- a. A flow reduction or constriction device to prevent the flow through each separator from ever exceeding the maximum design flow rate or,
- b. by demonstrating to EPA and MADEP that the operational procedures are sufficiently clear and rigid that operator (s) will not exceed the maximum design flow rate of each O/W separator by concurrently draining more diked or undiked areas than prescribed in the procedures or,

- c. by any other means of control that prevents the flow from exceeding the flow from the exceeding the maximum design flow rate of each O/W separator.

The permittee shall conduct periodic compliance evaluations of the methods of control for regulating water flow rate and treating and managing storm water through the O/W separators, as described in the Storm Water Pollution Prevention Plan Requirements.

6. Toxics Control

- a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.
- b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

7. Numerical Effluent Limitations for Toxicants

EPA or DEP may use the results of the toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act(CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR Part 122.

B. BEST MANAGEMENT PRACTICES PLAN

The permittee shall update and implement the existing Best Management Practices (BMP) plan to achieve the stated objectives and which conforms to the following requirements:

1. General Conditions

a. General Objectives

The objectives of the BMP plan are to minimize the potential for violations of terms of the permit; to protect the designated water uses of the surrounding surface water bodies, and to mitigate pollution from material storage areas, in-plant transfer, process and material handling areas, loading and unloading operations, plant site runoff and accidental spills. Both wet-weather and dry-weather conditions are to be considered in the BMP plan.

b. Implementation

An updated BMP plan shall be developed within 90 days of the effective date of the permit and available to EPA and the State upon request. The permittee shall have on file a statement that certifies that the BMP plan has been updated and it shall be implemented in accordance with its schedule and requirements. This certification shall be signed in accordance with NPDES General Requirements, Part II.D.2 Implementation of all aspects of the plan shall commence no later than 12 months after the effective date of the permit. (see part I.B.3 Implementation Schedule below) unless a later date is approved in writing by the Regional Administrator and the Director.

c. General Requirements

The BMP plan shall:

- (1) Be documented in narrative form, and shall include any necessary plot plans, drawings, or maps.
- (2) Establish specific objectives for the control of toxic and hazardous pollutants.
 - (a) Each facility component or system will be examined for its potential for causing a release of significant amounts of toxic and hazardous pollutants to surface waters due to equipment failure, improper operation, natural phenomena such as precipitation, etc.

Locations at which bypasses of the treatment systems may occur as well as projected conditions under which a bypass may be necessary will be submitted.
 - (b) Where experience indicates a reasonable potential for equipment failure (e.g. a tank overflow or leakage), natural phenomena (e.g., precipitation), or other circumstances to result in significant amounts of toxic or hazardous pollutants reaching surface waters, the plan shall include a prediction of the direction, rate of flow and total quantity of toxic or hazardous pollutants which could be discharged, from the facility as a result of each condition or circumstances.
- (3) Establish specific best management practices to meet the objectives identified under Part I.B.1.c.(2) of this section, addressing each component of system capable of causing a release of significant amounts of toxic or hazardous pollutants to surface waters. Examples are: specific practices to minimize and/or control the use of bypasses shall be identified, maximum flow rate control through the o/w separator, etc.
- (4) Include any special conditions established in accordance with Part I.B.2 Specific Conditions , below.
- (5) Be reviewed by plant engineering staff and the terminal manager.

(d) Specific Requirements

The plan shall be consistent with the general guidance contained in the publication entitled “NPDES Best Management Practices Guidance Documents” and shall consider the following base line BMP’s as a minimum:

- (1) BMP Committee
- (2) Report BMP Incidents
- (3) Risk Identification and Assessment
- (4) Employee Training
- (5) Inspections and Records
- (6) Preventive Maintenance
- (7) Good Housekeeping
- (8) Material Compatibility
- (9) Security

e. SPCC Plans and Standard Company Operational Procedures

The BMP plan may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under Section 311 of the Act and 40 CFR Part 112, and may incorporate any part of such plans into the BMP plan by reference. Any promulgated Standard Company Operational procedures may be incorporated into the BMP plan by reference. Copies of both the SPCC plan and operational procedures will be attached to the BMP plan for convenience in referencing the appropriate sections.

f. Hazardous Waste Management

The permittee shall assure the proper management of solid and hazardous waste in accordance with regulations promulgated under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1978 (40 U.S.C. 6901 et seq), or amendments thereto. Management practices required under RCRA regulation shall be referenced in the BMP plan.

g. Documentation

The permittee shall maintain a description of the BMP plan at the facility and shall make the plan available to the Regional Administrator and the Director upon request.

h. BMP Plan Modification

The permittee shall submit to the Regional Administrator and the Director an amended BMP plan within 30 days of a change in the physical facility or a change in the operational procedures of the facility which materially increases the potential for the ancillary activities to result in a discharge of significant amounts of hazardous or toxic pollutants.

i. Modification for Ineffectiveness

If the BMP proves to be ineffective in achieving the general objective of preventing the release of significant amounts of toxic or hazardous pollutants to surface waters and the specific objectives and requirements under Part I.B.2. herein, the permit and/or the BMP plan shall be subject to modification (40 CFR §122.64 and §122.63) to incorporate revised BMP requirements.

2. Specific Conditions

a. All surface runoff from process or work areas at the facility shall be treated or contained and diverted to the final treatment system. Process or work areas are defined for the permit as all those areas subject to spills and leaks of raw materials or products containing toxic or hazardous substances, i.e. diked areas, docks, loading and unloading areas, yard areas, etc.

(1) Treatment, at a minimum, shall consist of an efficiently operated o/w separator.

(2) The final treatment system must be capable of treating and/or containing in a holding basin a total volume of surface runoff, from process areas defined in Part I.B.2.a above, produced by 24-hour rainfall occurring with a frequency of once in 10 years.

The permittee shall provide detailed design optimum and maximum oil and water flow rates for the o/w separator and other treatment equipment now in use or any proposed treatment equipment for Outfall 001 (if an o/w separator is used). This design criteria shall include but not be limited to sketches of the equipment, the design water flow capacity, the design oil recovery rate, the design specific gravities of the oil and water, design oil droplet size, and design operating temperature range.

The contents of any diked area or holding basin shall be released to the final treatment system subject to Specific Condition I.B.2.a.(3) immediately below.

- (3) The release of runoff from any diked area or holding basin shall be controlled so that this discharge alone or in combination with all other wastewaters does not exceed the optimum design flow rate for the o/w separator or cause violations of effluent limitations specified in Parts I.A.1, and I.A.2, for outfalls 001. Note: The tank bottoms drawoffs and bilge water shall conform to the requirements in Part I.A.3.h before release.
- b. All storm water runoff accumulated in the tank diked areas shall be discharged, only if, for each discharge event, a visual inspection is made of the diked areas to ensure that the treatment system can handle the released water and any apparent pollutant load.
- c. The existing capability to divert storm water drainage bypassing Outfall 001, shall be subject to Parts I.B.2.a. and Parts I.B.2.b.
- d. The BMP plan shall specifically address the adequacy of containment of leaks and spills in the storage areas and truck loading area. Adequate containment must exist at these locations so as to prevent untreated discharges from reaching any surface water.
- e. A schedule for routinely monitoring and cleaning the o/w separators for both sludge layer shall be specified in the BMP plan. In addition, the BMP plan shall establish procedures for insuring compliance with part I.B.1 General Conditions and part I.B.2. Specific Conditions during such cleaning or maintenance periods.
- f. The disposal procedures for tank bottom sludge, o/w separator sediment, and any washdown waters containing detergents, dispersants, emulsifiers, etc. will be addressed in the BMP plan.
3. Implementation Schedule
 - a. Construction of any facilities shall begin within 9 months of the effective date of the permit.
 - b. All construction required by the BMP plan and these Specific Conditions shall be completed and the facilities placed in operation within 24 months of the effective date of the permit or at a later date as may be approved by the Regional Administrator and the Director.
 - c. All aspects of the BMP plan which do not require construction shall be implemented on the submittal date of the BMP plan (90 days after the effective date of the permits). All other requirements and conditions shall be implemented upon completion of the respective construction, or within 24 months of the effective date of the permit or at a

later date as may be approved by the Regional Administrator and the Director.

- d. The EPA and the State may comment on the BMP plan no later than 9 months from the effective date of the permit. If EPA or the State submit comments, the permittee will be given a written explanation of the exact nature of any problems and a reasonable period of time (usually not to exceed 90 days) to resubmit a modified BMP plan addressing those concerns.

4. BMP Reporting Requirements

- a. The permittee shall prepare and submit an annual BMP report to the EPA and the DEP by November 15. This report shall address the adequacy of the BMP plan in achieving the general objective of preventing the release of significant amounts of toxic or hazardous pollutants to surface waters and the specific objectives and requirements under Parts I.B.(1)(c), and (d). In addition it shall also include :
 - (1) A list of fuels, additives and chemicals stored in bulk at the facility.
 - (2) Estimate the volume of tank bottom drawoffs and bilge water disposed by facility during the previous reporting period and disposition of those tank bottom drawoffs and bilge water.
 - (3) A list of any changes in activities at the facility such as but not limited to changes in the product line, storm water collection system, treatment and discharge system, and significant physical facility changes such as the number of storage tanks used, the size of the land parcel, new docks new loading racks, etc.

C. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from those outfalls listed in Part I A.1. and 2. of this permit. Discharges of wastewater from any other point source are not authorized and shall be reported in accordance with Section D.1.e. (1) of the General Requirements of this permit (Twenty-four hour reporting).

D. MONITORING AND REPORTING

1. Reporting

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the month following the effective date of the permit.

Signed and dated originals of these, and all other reports required herein, shall be

submitted to the Director and the State at the following addresses:

Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

The State Agency address for all reports except toxicity tests is:

Massachusetts Department of Environmental Protection
Northeast Regional Office
205A Lowell Street
Wilmington, MA 01887

Signed and dated DMRs, and toxicity test reports required by this permit shall be submitted to the State at:

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608

E. STATE PERMIT CONDITIONS

1. This Discharge Permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (DEP) under Federal and State law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MA DEP pursuant to M.G.L. Chap.21, §43.
2. Each Agency shall have the independent right to enforce the terms and conditions of this Permit. Any modification, suspension or revocation of this Permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this Permit is declared, invalid, illegal or otherwise issued in violation of State law such permit shall remain in full force and effect under Federal law as a NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this Permit is declared invalid, illegal or otherwise issued in violation of Federal law, this Permit shall remain in full force and effect under State law as a Permit issued by the Commonwealth of Massachusetts.

Polynuclear Aromatic Hydrocarbons (PAHs)

Following is a list of the Polynuclear Aromatic Hydrocarbons (PAHs) to be considered in this permit. This list is identical to the list shown in 40 CFR §136, Appendix A, method 610.

Parameters	CAS NO.
Acenaphthene	83-32-9
Acenaphthylene	208-96-8
Anthracene	12-12-7
Benzo (a) anthracene	56-55-3
Benzo (a) pyrene	50-32-8
Benzo (b) fluoranthene	205-99-2
Benzo (ghi) perylene	191-24-2
Benzo (k) fluoranthene	207-08-9
Chrysene	218-01-9
Dibenzo (a,h) anthracene	53-70-3
Fluoranthene	206-44-0
Fluorene	86-73-7
Indeno (1,2,3-cd) pyrene	193-39-5
Naphthalene	91-20-3
Phneanthrene	85-01-8
Pyrene	129-00-0

ATTACHMENT C
STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

a. Deadlines for Plan Preparation and Compliance

There are no additional deadlines for plan preparation and compliance, other than those stated in the permit. Part I.C. of the permit, requires the permittee to develop and implement a storm water pollution prevention plan (SWPPP) no later than 180 days after the effective date of the permit.

b. Contents of the Plan

The plan shall include, at a minimum, the following items:

- (1) Pollution Prevention Team -The plan shall identify specific individuals within the facility organization as members of a storm water pollution prevention team who are responsible for developing the storm water pollution prevention plan and assisting the facility or terminal manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.
- (2) Description of Potential Pollutant Sources -The plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. The plan shall identify all activities and significant materials which may potentially be significant pollutant sources. The plan shall include, at a minimum:
 - (a) Drainage - A site map indicating the location of each point of discharge of storm water associated with industrial activity, an outline of the portions of the drainage area of each storm water outfall locations. The site map must also indicate the types of discharges contained in the drainage areas of the outfalls (e.g., storm water and air conditioner condensate). In order to increase the readability of the map, the inventory of the types of discharges contained in each outfall may be kept as an attachment to the site map.
 - (b) Inventory Exposed Materials - An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that are or have been handled, treated, stored or disposed in a manner to allow exposure to storm water; method and location of onsite storage or disposal; dirt or gravel parking areas for storage of vehicles to be maintained; materials management practices employed to minimize contact of materials with storm water runoff; the location and a description of existing structural and on structural control measures to reduce pollutants in storm water runoff and a description of any

treatment the storm water receives.

- (c) **Spills and Leaks** - A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility. Such list shall be updated as appropriate during the term of the permit.
- (d) **Sampling Data** - A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.
- (e) **Summary of Potential Pollutant Sources** - if applicable, a narrative description of the potential pollutant sources from the following activities: truck loading rack, maintenance shops, equipment or vehicle cleaning areas, paved dirt or gravel parking areas for vehicles, loading and unloading operations, outdoor storage activities, outdoor manufacturing or processing activities, significant dust or particulate generating processes activities, and onsite waste disposal practices. The description shall list specifically any significant potential source of pollutants at the site and for each potential source of pollutant at the site and for each potential source, any pollutant or pollutant parameter (e.g., oil and grease, etc.) of concern shall be identified.
- (3) **Measures and Controls** -The permittee shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:
 - (a) **Good Housekeeping** - All areas that may contribute pollutants to storm water discharges shall be maintained in a clean, orderly manner. If applicable, the following areas must be specifically addressed:
 - (i) **Vehicle and Equipment Storage Areas** - The storage of vehicles and equipment with actual or potential fluid leaks must be confined to designated areas (delineated on the site map). The plan must describe measures that prevent or minimize contamination of the storm water runoff from these areas. The facility shall consider the use of drip pans under vehicles and equipment, indoor storage of the vehicles and equipment, installation of berming and diking of this area, use of absorbents, roofing or covering storage areas, cleaning pavement surface to remove oil and grease, or other equivalent methods.
 - (ii) **Truck Loading Racks** - The plan must describe measures that prevent or minimize contamination of the storm water runoff from fuel loading areas. The facility shall consider berming the loading rack area(s), using spill and overflow protection and cleanup equipment, minimizing runoff/runoff of storm water to the loading rack area(s)

by way of storm water drains, using dry cleanup methods, collecting the storm water runoff and providing treatment or recycling, or other equivalent measures.

- (iii) **Material Storage Areas** - Storage units of all materials (e.g., used oil, used oil filters, spent solvents, paint wastes, radiator fluids, transmission fluids, hydraulic fluids) must be maintained in good condition so as to prevent contamination of storm water, and plainly labeled (e.g. "used oil, spent solvents, etc.") The plan must describe measures that prevent or minimize contamination of the storm water runoff from such storage areas. The facility shall consider indoor storage of the materials, installation of berming and diking of the area, minimizing runoff of storm water to the areas, using dry clean up methods, collecting the storm water runoff and providing treatment, or other equivalent methods.
- iv) **Vehicle and Equipment Cleaning Areas** - The plan must describe measures that prevent or minimize contamination of storm water runoff from all areas used for vehicles and equipment cleaning. The facility shall consider performing all cleaning operations indoors, covering the cleaning operation, ensuring that all wash waters drain to the intended collection system, collecting the storm water runoff from the cleaning area and providing treatment or recycling, or other equivalent measures.
- (v) **Vehicle and Equipment Maintenance Areas** - The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment maintenance. The facility shall consider performing all maintenance activities indoors, using drip pans, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting wet clean-up practices where the practices would result in the discharge of pollutants to storm water drainage systems, using dry cleanup methods, collecting the storm water runoff from the maintenance area and providing treatment or recycling, minimizing runoff of storm water areas or other equivalent measures.
- (b) **Preventive Maintenance** - A preventive maintenance program shall include timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators for both sludge and oil layers, catch basins, drip pans, vehicle-mounted drip containment devices) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems. Procedures should be established insuring compliance with permit conditions during cleaning or maintenance periods. Preventative maintenance procedures shall be included in the plan. A schedule for routinely monitoring and cleaning the oil/water separator(s) for both sludge and oil layers shall be specified in the plan. The permittee shall record all inspections and maintenance activities in the plan.
- (c) **Spill Prevention and Response Procedures** - Areas where potential spills could contribute pollutant to storm water discharge and their accompanying drainage points,

shall be identified clearly in the storm water pollution prevention plan . Adequate containment against spills and leaks must exist in these areas to prevent discharges of pollutants to surface waters. Where appropriate, specifying material shall be identified in the plan and made available to the appropriate personnel.

- (d) Inspections - Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility on a quarterly basis. The following areas shall be included in all inspections: storage area for vehicles and equipment awaiting maintenance, truck loading rack area(s), vehicle and equipment maintenance areas (both indoors and outdoors), material storage areas, vehicle and equipment cleaning areas, and loading and unloading areas. Follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained. The use of a checklist should be considered by the facility.
- (e) Employee Training - Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify how often training will take place; at a minimum, training must be held annually (once per calendar year). Employee training must, at a minimum, address the following areas when applicable to a facility: summary of the facility's pollution prevention plan requirements; used oil management; spent solvent management; spill prevention, response and control; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.
- (f) Recordkeeping and Internal Reporting Procedures - A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.
- (g) Non-storm Water Discharges
- (i) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of and test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and, /or evaluation, and the onsite drainage points that were directly observed during the test.

Certifications shall be signed in accordance with Part II.D.2. (Signatory Requirements) of this permit. Such certification may not be practical if the facility operating the storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution prevention plan shall indicate why the certification required by this part was not practical, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Director.

- (ii) Except for the following non-storm water discharges: flows from fire fighting activities; fire hydrant flushings; hydrostatic-test water; potable water sources including waterline flushings; drinking fountain water; uncontaminated compressor condensate; irrigation drainage; lawn waterings, vehicle washings that do not use detergents or other compounds; routine external building washdown that does not use detergents or other compounds; pavement washwater where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; compressor condensate; uncontaminated springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents, all discharges covered by this plan shall be composed entirely of storm water.
- (iii) If applicable, a copy of the NPDES permit issued for vehicle and equipment washwaters or, if a NPDES permit has not yet been issued, a copy of the pending application must be attached to or referenced in the plan. For facilities that discharge vehicle and equipment washwaters to the sanitary sewer system, the operator of the sanitary sewer system and associated treatment plant must be notified. In such cases a copy of the notification letter must be attached to the plan. If an industrial user permit is issued under a pretreatment program, a copy of that permit must be attached in that plan. In all cases, any permit condition or pretreatment requirements must be considered in the plan. If the washwaters are handled in another manner (e.g., hauled offsite), the disposal method must be described and all pertinent documentation (e.g., frequency, volume, destination, etc.) must be attached to the plan.
- (iv) Failure to Certify - Any facility that is unable to provide the certification required (testing for non-stormwater discharges), must notify the Director by 180 days after the effective date of the permit. If the failure to certify caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the United States which are not authorized by a NPDES permit are unlawful, and must be terminated.
- (h) Disposal Procedures - The disposal procedures for tank bottom waters, tank bottom

sludge, O/W Separator sediments, O/W Separator oils, oil absorbent cleaning material (s) and any washdown waters containing detergents, dispersants, emulsifiers, etc. must be documented in the plan.

- (4) Comprehensive Site Compliance Evaluation -Qualified personnel shall conduct comprehensive site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once a year. Such evaluations shall provide:
- (a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.
 - (b) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with paragraph b.(2)., Description of Potential Pollutant Sources, of the plan and pollution prevention measures and controls identified in the plan in accordance with paragraph b.(3)., Measures and Controls of this plan shall be revised as appropriate within 2 weeks of such evaluation and shall provide for implementation for any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation.
 - (c) A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with Paragraph b.(3)(b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least 3 years after the date of the evaluation. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part II.D.2. (Signatory Requirements) of this permit.
 - (d) Where compliance evaluation schedules overlap with inspections required under Paragraph.b.(3)(d), the compliance evaluation may be conducted in place of one such inspection.
 - (e) A report summarizing the effectiveness of the methods of control for regulating the water flow rates through the O/W separator(s) in order to maximize optimum pollutant reduction and compliance with permit limits.